

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

Claims 1. - 23.(Cancelled)

24. (Currently Amended) A process for preparing a tricondensate polyfunctional isocyanate composition, comprising:

A) the following step a) and b) in any order:

a) (cyclo)condensing one or more identical or different first isocyanate monomer(s) to obtain a tricondensate polyfunctional reaction product;;
b) reacting one or more second isocyanate monomer(s) which are identical to or different from one another and identical to or different from the first isocyanate monomer(s), the second monomer(s) being linear alkyl isocyanate monomer(s), with C₄-C₈ linear alkyl alcohol(s) to obtain an allophanate of one or more identical or different isocyanates, or a mixture of different allophanates;

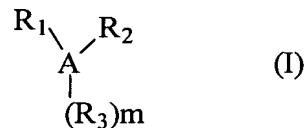
B) step c) and d) in any order:

c) adding the reaction product from step b) to the reaction product from step a), and optionally,
d) removing the isocyanate monomer(s), and

C) obtaining a low-viscosity tricondensate polyfunctional composition, wherein said composition comprises less than 2% of tricondensate allophanate relative to the total weight of the composition.

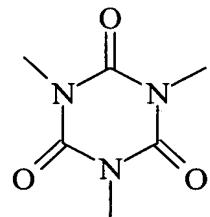
25. (Currently Amended) A process for preparing a low viscosity tricondensate polyfunctional isocyanate composition, comprising at least one isocyanurate and/or biuret group, which comprises the steps of: (1) preparing a tricondensate polyfunctional isocyanate reaction product, or a mixture of different tricondensate polyfunctional isocyanates reaction products, by (cyclo)trimerization of one or more identical or different isocyanate monomers and optionally of another monomer, (2) preparing an allophanate of one or more identical or different linear alkyl isocyanates, or a mixture of different allophanates by reacting a C₄-C₈ linear alkyl alcohol with said one or more identical or different linear alkyl isocyanates, and (3) admixing said tricondensate polyfunctional isocyanate reaction product or said mixture of different tricondensate polyfunctional isocyanates reaction products prepared from step (1) above with allophanate or mixture of different allophanates prepared in step (2) above, the isocyanates or mixtures of isocyanate monomers used to prepare the polyfunctional isocyanate(s) reaction product(s) being identical to or different from the isocyanate(s) or the mixture of isocyanates used to prepare the allophanate(s), wherein said composition comprises less than 2% of tricondensate allophanates relative to the total weight of the composition.

26. (Currently Amended) The process of Claim 24 or Claim 25, wherein the tricondensate polyfunctional isocyanate reaction product has the following general formula:

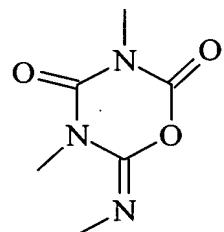


in which A represents:

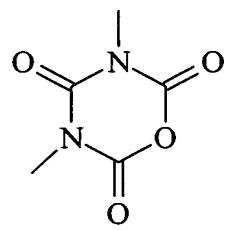
- an isocyanurate group of formula:



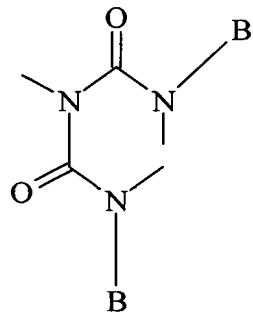
- an imino-oxadiazine-dione of the following formula:



- an oxadiazine-trione of the following formula:

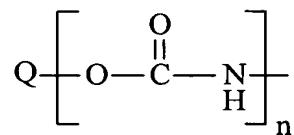


- a biuret group of formula



B being H or a C₁₋₂₀ group containing optionally, other atoms; or

- a group of formula:



and in which R₁, R₂ and R₃, identical or different, represent a group containing carbon and hydrogen, comprising a true or derived isocyanate function or a derived function selected from the group consisting of carbamate, urea, biuret, urethane, uretinedione, isocyanurate and masked isocyanate,

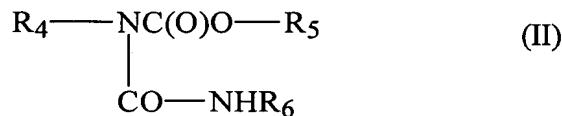
Q is a group, as defined for R₁ to R₃,

m is an integer from 0 to 2,

n is the integer 3 or 4.

27. (Previously Presented) The process of claim 24 or 25, wherein the low viscosity tricondensate polyfunctional isocyanate composition comprises at least one isocyanurate polyisocyanate.

28. (Currently Amended) The process of claim 24 or claim 25, wherein the allophanates are of the following formula II:



in which:

- R_4 and R_6 , identical or different, represent a group containing carbon and hydrogen comprising a true ~~or derived~~ isocyanate function or a derived function selected from the group consisting of carbamate, urea, biuret, urethane, uretinedione, masked isocyanate and allophanate,
- R_5 represents a C₄-C₈ linear alkyl group.

29. (Currently Amended) The process of claim 24 or claim 25, wherein a mixture of allophanates, is added to the tricondensate polyfunctional isocyanates reaction products.

30. (Previously Presented) The process of claim 24 or claim 25, wherein the mixture of allophanates comprises mono-, bis- and trisallophanates, in an amount of at least 2/3, by weight relative to the total weight of the allophanate mixture after removal of unreacted monomers.

31. (Previously Presented) The process of claim 24 or claim 25, wherein the mixture of allophanates comprises mono-, bis- and trisallophanates, in an amount of at least

75%, by weight relative to the total weight of the allophanate mixture after removal of unreacted monomers.

32. (Previously Presented) The process of claim 24 or claim 25, wherein the mixture of allophanates comprises mono-, bis- and tris-allophanates, in an amount of at least 90%, by weight relative to the total weight of the allophanate mixture after removal of unreacted monomers.

33. (Previously Presented) The process of claim 24 or claim 25, wherein the bis-allophanate represented up to 10% of the total weight of the allophanate.

34. (Previously Presented) The process according to claim 24 or claim 25, wherein tris-allophanates are less than or equal to 30%, relative to the total weight of the allophanate.

35. (Previously Presented) The process according to claim 24 or claim 25, wherein tris-allophanates are less than or equal to 20%, relative to the total weight of the allophanate.

36. (Previously Presented) The process according to claim 24 or claim 25, wherein tris-allophanates are less than or equal to 15%, relative to the total weight of the allophanates.

37. (Original) The process of claim 24 or claim 25, wherein the mixture of allophanates comprises mono-, bis- and tris-allophanates and the ratio bis-allophanate functions + tris-allophanate functions/mono-allophanate functions is equal to or greater than 0.1.

38. (Original) The process of claim 24 or claim 25, wherein the mixture of allophanates comprises mono-, bis- and tris-allophanates and the ratio bis-allophanate functions + tris-allophanate functions/mono-allophanate functions is equal to or greater than 0.3.

39. (Original) The process of claim 24 or claim 25, wherein the mixture of allophanates comprises mono-, bis- and tris-allophanates and the ratio bis-allophanate functions + tris-allophanate functions/mono-allophanate functions is equal to or greater than 0.5.

40. (Previously Presented) A process for preparing a low-viscosity tricondensate polyfunctional isocyanate composition, comprising the following steps a) and b) in any order:

a) (cyclo)condensating, in the presence of a catalyst, of one or more identical or different first isocyanate monomer(s) until a degree of conversion is obtained;

b) reacting one or more second isocyanate monomer(s) which are identical to or different from one another and identical to or different from the first isocyanate monomer(s), with a C₄-C₈ linear alkyl alcohol to form a carbamate, the reaction optionally being catalyzed, and simultaneous or subsequent reaction of the carbamate with one or more isocyanate monomer(s) which are identical to or different from the previous monomers, to give an allophanate or mixture of allophanates;

and steps c) and d) in any order:

c) mixing the reaction product from step a) with all or some of the reaction product from step b) and optionally

d) removing the isocyanate monomers, wherein said composition comprises less than 2% of tricondensate allophanates relative to the total weight of the composition.

41. (Previously Presented) The process of claims 24 or 40, wherein the isocyanate(s) used for the (cyclo)condensation reaction is (are) identical to the isocyanate(s) used for the allophanatization reaction.

42. (Previously Presented) The process of claims 24 or 40, wherein the isocyanate(s) used for the allophanatization reaction and the isocyanate(s) used for the cyclocondensation reaction satisfy one, two or three of the following conditions:

- at least one or at least two, of the NCO functions are linked to a carbon-containing skeleton via a saturated (sp^3) carbon;
- at least one or at least two, of said saturated (sp^3) carbons bears at least one hydrogen(s)

- all the intermediate carbons via which the isocyanate functions are linked to the carbon-containing skeleton are saturated (sp^3) carbons which partially, or totally, bear one hydrogen or two hydrogens.

Claim 43. (Canceled)

44. (Previously Presented) The process of claim 40, wherein the NCO/OH ratio of the isocyanate and the alcohol in step b) is greater than 4.

45. (Canceled)

46. (Previously Presented) A low viscosity tricondensate polyfunctional isocyanate composition comprising at least one true tricondensate polyfunctional isocyanate and at least one primary allophanate prepared from a C₄-C₈ linear alkyl alcohol, said composition comprising less than 2% of tricondensate allophanates relative to the total weight of the composition.

Claims 47. - 51. (Canceled)

52. (Previously Presented) A low viscosity tricondensate polyfunctional isocyanate composition comprising at least one true tricondensate polyfunctional isocyanate and at least one primary allophanate prepared from a C₄-C₈ linear alkyl alcohol, said composition comprising less than 1% of tricondensate allophanates relative to the total weight of the composition.

53. (Currently Amended) The low viscosity tricondensate polyfunctional isocyanate composition of claim 46, said composition satisfying at least one of the following conditions:

- a G ratio defined by:

true tricondensate polyisocyanates, obtained from the condensation of three identical or different isocyanate molecules not modified with carbamate or allophanate

G= _____

sum of the polyisocyanate molecules bearing at least one tricondensate function obtained from the condensation of three identical or different isocyanate molecules greater than 0.3,

- an allophanate/allophanate + true trimer weight ratio of between 2.5% and 99%,
- the tricondensates are obtained from a tricondensation reaction for which the degree of conversion of the identical or different isocyanate monomer(s) into tricondensate polyfunctional polyisocyanates polyisocyanate reaction products contained in the composition is greater than 8%,
- at least 1% and not more than 99%, of biuret is present, these amounts being given on a weight basis.

54. (Previously Presented) The low viscosity tricondensate polyfunctional isocyanate composition of claims 46 or 53, wherein the allophanates comprises mono-, bis- and tris-allophanates in an amount of at least 2/3, by weight relative to the total weight of the allophanate after removal of unreacted monomers.

55. (Previously Presented) The low viscosity tricondensate polyfunctional isocyanate composition of claims 46 or 53, comprising an amount of bis-allophanate representing up to 10%, of the total weight of the allophanate.

56. (Previously Presented) The low viscosity tricondensate polyfunctional isocyanate composition of claims 46 or 53, comprising an amount of tris-allophanates less than or equal to 30%, by weight relative to the total weight of the composition.

57. (Previously Presented) The low viscosity tricondensate polyfunctional isocyanate composition of claims 46 or 53, comprising a ratio bis-allophanate functions +

tris-allophanate functions/monoallophanate functions greater than or equal to 0.1, and up to 0.3.

58. (Previously Presented) The low viscosity tricondensate polyfunctional isocyanate composition of claim 46, comprising hexamethylene diisocyanate biuret.